

Seacions August 2013

DIGITAL OZONESONDE CHECKLIST

FLT# HU 813

INITIAL PREPARATION ~7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 08/19/2013 1. Run zero air 10 minutes (v) 5. Bypass cell (v)
 INITIALS: NLP 2. PUMP CURRENT: 92.04 6. Add 5-6cc cathode (v)
 PUMP# (add x,y,z,R): 2224639 3. PUMP PRESSURE: >10 7. 30 MINUTES HI O₃ (v)
 4. ENSCI Press/vac: 32/20 in Hg 8. 3 MINUTES NO O₃ (v)

9. DUMP CATHODE RINSE: (v) 16. Run sonde for 10 minutes on NO O₃ AIR (v)
 10. ADD 3.0 CC FRESH CATHODE # (v) 17. Short the cell leads: (v)
 11. ADD 1.5 CC ANODE SOLUTION: (v) 18. Intake tube stored in sonde frame: (v)
 12. RUN 10 MINUTES on NO O₃ (v) 19. Place Instrument inside plastic bag: (v)
 13. RECORD CURRENT: BG = 0.172 μ amps 20. Store inside Styrofoam flight box: (v)
 14. RUN 10 MINUTES on 5 μ amps O₃ (v) - then switch to NO O₃ AIR.
 15. RECORD: TIME TO DROP FROM 4 TO 1.5 μ amps: 34.26 sec.

2-5 DAYS AFTER INITIAL PREP: REPLACE SOLUTIONS: DATE (LOCAL): 08/21/2013

1. Replace Cathode/Anode (v) 6. RECORD TIME TO DROP FROM 4 TO 1.5 μ amps: 23.27 sec
 2. RUN 5 MINS on NO O₃ (v) 7. RUN 5 MINS on NO O₃ (v)
 3. RECORD CURRENT: 0.131 μ amps 8. Short cell leads (v)
 4. RUN 5 MINS on 5 μ amps O₃ (v) 9. Store inside Styrofoam flight box: (v)
 5. Switch to NO O₃ AIR

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 08/24/2013
 INITIALS: NLP

T100 FLOWRATE TIMES:

ROOM TEMP (C): 25.2, ROOM RH (%): 49
 Flowrate Correction: 1.49 (%)
 FLOWRATE #1: 27.01 sec
 FLOWRATE #2: 26.93 sec
 FLOWRATE #3: 26.89 sec
 FLOWRATE #4: 27.02 sec
 FLOWRATE #5: 26.98 sec
 •AVERAGE T100: 26.97 sec

1. Cathode solution # or date written on bottle: 238
 2. CHANGE CATHODE SOLUTION (3cc): (v)
 3. CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
 4. RUN ON NO O₃ FOR 10 MINUTES: (v)
 5. RECORD THE NO O₃ BACKGRND#1: BG1 = 0.055 μ amps
 6. RUN ON 5 microamps of O₃ for 10 Minutes: (v)
 7. SWITCH TO NO O₃ AIR.
 8. RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 22.69 sec
 9. RECORD: 5 - T100 FLOWRATE TIMES:

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU 813
 GMT DATE (YYMMDD): 08/24/2013 LOCAL DATE: 08/24/2013
 GMT LAUNCH TIME: 17:42 LOCAL TIME: 12:42
 Operator Initials: NLP
 BALLOON SIZE: 1000 Grams: TOTEX _____ Hwoyee (v one)
 PAY-OFF-WEIGHT: 1700 Grams: Burst Alt: 29.16(km)

O₃ sn: 2224639 O₃ CELL BACKGROUND (μ amps): 0.055
 O₃ Flowrate: 26.97 (sec) O₃ Flowrate Correction: 1.49 (%)

Radiosonde s/n: 20967 Freq: 403 (MHz)

SURFACE PRES: 996.5 (hPa)
 SURFACE TEMP: 31 (C)
 SURFACE RH: 55.6 (%)

Sky Conditions: Mostly sunny, SE wind around 10 mph, 20% chance of showers (NOAA weather)

REMARKS: